



Docket No.: SYS-2068  
Internal No.: 4-30598/P1  
Serial No.: 09/237,291

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Young et al. )  
Serial No.: 09/237,291 ) Art Unit: 1635  
Filed On: January 25, 1999 ) Examiner: M. Schmidt

8/B  
SQJ  
2/1/00

For: **EXPANDED AND GENETICALLY MODIFIED POPULATIONS OF HUMAN HEMATOPOIETIC STEM CELLS**

CERTIFICATE OF MAILING BY "FIRST CLASS MAIL"

*I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, DC 20231, on January 21, 2000*

*Christa Carter*  
Christa Carter

AMENDMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Dear Sir:

Please enter the following amendment in response to the Office Action dated October 27, 1999.

In the Claims:

18. (amended) A method for genetically modifying human hematopoietic stem cells, comprising:
- a) contacting a vector comprising a polynucleotide sequence encoding a heterologous gene with a population of hematopoietic stem cells cultured with fibronectin and in the presence of an effective amount of a mpl ligand and a flt3 ligand each ligand provided in a concentration range of about 0.1 ng/mL to about 500 ng/mL, wherein said vector is selected

B<sup>1</sup>